

# Public Works

## Digest

Volume VIII, No. 2  
March 1996

*A publication of the U.S. Army  
Center for Public Works*

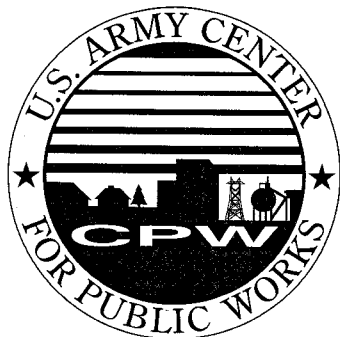


*In This Issue...*

**New  
Moves  
in Army  
Housing**

# Public Works

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*Public Works Digest* is an unofficial publication of the US Army Center for Public Works, under AR 360-81. Method of reproduction: photo-off-set; press run: 4,000; estimated readership: 40,000. Editorial views and opinions expressed are not necessarily those of the Department of the Army.

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## BOP helps installations make "smart" decisions

by Alexandra K. Stakhiv

Installations no longer have to depend on the number of units in their inventory for family housing funding. With the adoption of the Business Occupancy Program (BOP) on 1 October 1995, the Army now funds family housing based on the number of units occupied. When soldiers accept government quarters, installations receive the dollars equivalent to the BAQ and VHA that the soldiers forfeit.

### Why did the Army go into this program?

The dollars in the Army family housing budget fall far short of what's actually in the inventory. As a result, the Army had a forced "de facto" strategy of underfunding all family housing. One way to combat this shortfall was to move to more business-like operations.

Debbie Hines-Reynolds of the ACSIM's Army Housing Division sees BOP as an important step toward more business-like operations in the housing arena. "The BOP is the first part of a three-pronged strategy to improve the quality of life for soldiers living in family

housing," says Hines-Reynolds. "The other parts aim to increase funding for family housing and to get uneconomical units out of the inventory through divestment or demolition."

### How has BOP changed housing operations?

BOP has dramatically changed the way housing personnel manage their quarters, says Hines-Reynolds. Installations used to look for big projects to do with year-end funds because it was easier to develop those kinds of projects and, more importantly, they were more likely to win funding for them. Now they can do smaller projects and take care of the work that really needs to be done.

Under the old funding program, installations did a lot of work at the same time, often taking a whole housing area out of the inventory. Now, with smaller jobs, they can keep quarters occupied.

Little effort was being made at installations to reduce the excess housing inventory, as they drew down their personnel. BOP forces them to do something with the excess housing.

### How do we implement BOP?

The ACSIM Housing Division developed new software for the HOMES system to implement BOP, allowing installations to send their BOP reports to the ACSIM. The software rolls up information that installations enter into HOMES and reports it upward, making it easy to implement BOP at the installation level.

BOP gets everyone involved. "We have a working group-level meeting with MACOM representatives to discuss current issues which we staff and send to an oversight group," says Hines-Reynolds.

The BOP Oversight Group consists of the ACSIM and the Director, Army Budget, who act as co-chairs, Sergeant Major of the Army, ARSTAF general officers and MACOM general officers. The Working Group identifies issues and makes recommendations to the Oversight Group. The Oversight Group makes the final decision on the issues. "We try to be the honest broker between installations and their MACOMs by reporting whatever happens to the Oversight Group."

Housing gets involved by empowering employees to make decisions, keeping the command informed and identifying lessons learned.

The DPW reviews contracts and delivery orders, identifies any impediments and reports them through the MACOM to DA. The DPW also works with the Corps districts to incorporate BOP principles into their contracts.

Residents get involved in the program through home condition surveys, discussions at town hall meetings, participating in the Mayoral Program and self-help programs and press releases through CHRRS and newsletters.

### BOP wins test sites' approval

The BOP was tested at four prototype sites—Fort Bragg, Fort Dietrick, Fort Sill, and Aberdeen Proving

## Effects of Increasing Occupancy Rates

**Avg. Soldier  
Out-of-Pocket  
Savings =  
\$1,800**

Occupancy % Increase	Net Savings \$M*
1	9
2	18
2	27
4	36
5	45
6	54

*\*MPA savings less cost to keep units occupied*



Ground from February through September 1995. All four installations were more than satisfied with the results. They found that the program has many positive features in addition to saving money, says Hines-Reynolds.

Here are some of their comments:

- Customers are happier because the Housing Office can do maintenance between occupants and not force soldiers into accepting quarters "as is," without painting. Housing personnel can plan to work when quarters are unoccupied and not disrupt the lives of occupants.
- With predictable funding, installations can identify their worst problems and do the planning necessary to fix them. Predicting the amount of operating money they're going to get from year to year has always been a major problem. When funding varies widely, it is very difficult to plan. BOP gives installations a predictable source of funds, so they know when they're going to get money and how much.
- BOP allows installations to focus on decreasing the backlog of deferred maintenance. It encourages the planning of preventive maintenance because the funding is predictable.
- The program makes it easier to get everyone on the Housing team to understand the importance of increasing occupancy. The money installations get to operate depends directly on their keeping occupants in units.
- Instead of having to let contracts at year-end and start work in the late fall to satisfy the bonafide need rule, installations can perform work when the weather is better. By spreading the work out, contractors charge less and the work gets done with fewer delays.

### Who saves with BOP?

Everyone saves with BOP— both the Army and service members. Before the Army paid for both the maintenance and operation of unoccupied units and the BAQ/VHA of service members living on the economy. Ser-

## FY 96 BOP Results Through Jan 96

- ✓ Army-wide results for Oct 95 – Jan 96 netted an increase in occupancy of 0.89%
- ✓ Net savings to MPA = \$2,002,500
- ✓ Out-of-pocket savings to soldiers and families = \$394,158

vice members living on the economy paid an average of 20 percent of their housing costs out of pocket. Today, thanks to the BOP, soldiers can get into on-post housing more quickly and save that money.

For example, Hines-Reynolds has charted the BOP Armywide results for October 1995 through January 1996.

They show an increase in occupancy of 0.89 percent. "Military Personnel, Army shows a net savings of \$2,002,500 and out-of-pocket savings to soldiers and their families of \$394,158 for the same time frame," says Hines-Reynolds. "And that's just for three months using October as the base month."

Previously, installations had no financial incentive to meet the targets occupancy rates set by housing regulations. Making their funding depend on occupancy rather than number of units is giving them the impetus they needed.

"BOP is providing installations the opportunity to make 'smart' decisions," said Hines-Reynolds.

☎ POC is Debbie Hines-Reynolds, Army Housing Division, (703) 355-8386 DSN 345. **PWD**

*Alexandra K. Stakhiv is the editor of the Public Works Digest.*

## Single soldiers in barracks receive personal phone service

Single soldiers at 14 Army installations may apply for personal telephone service for their barracks' rooms in the Spring.

The Army and Air Force Exchange Service (AAFES) recently formed a partnership with Sprint Communications Company, L.P. in a projected \$144 million contract to provide residential phone service to soldiers living in barracks at 14 Army installations. Eighty percent of the income AAFES generates from this phone usage will be donated to Morale, Welfare and Recreation to improve the quality of life for soldiers.

Cable installation is scheduled to begin soon for: Aberdeen Proving Ground, Maryland; Fort Leonard Wood, Missouri; Fort Benning, Georgia; Fort Monmouth, New Jersey; Fort Bliss, Texas; Fort Polk, Louisiana; Fort Eustis, Virginia; Fort Rucker, Alabama; Fort Leavenworth, Kansas; Fort Sill, Oklahoma; Fort

Jackson, South Carolina; Fort Huachuca, Arizona; Fort Lee, Virginia; and Schofield Barracks, Hawaii. Other installations may be added later.

The package offers soldiers free call waiting, voice mail, and regular local/long distance services. Telephones will be available for purchase at the PX.

"Even though soldiers must purchase their own phones, I think they'll appreciate gaining this new personalized service," said AAFES Business Senior Program Manager David Mason.

AAFES will establish Spring offices on participating installations for soldiers to conveniently apply for services and make payments. Payments will be similar to those in apartments off post; phone service rates will be no higher than local telephone rates. Soldiers will make payments directly to Sprint not AAFES. **PWD**



# New legislation gives installations tool box for improving housing

by Richard Brown

The chances of involving the private sector in Army family housing have become a lot better, thanks to a new tool box of incentives that Congress included in the latest DoD Authorization Bill, which President Clinton signed on February 10.

The Military Family Housing Act enables Army installations to enter into investment partnerships with the private sector. The Army hopes these public-private partnerships will make it possible to successfully renovate existing family housing units and build new housing — quality housing for soldiers and their families.

The partnerships are designed to be an attractive investment opportunity for the private sector. The Army hopes to get better quality family housing for its money, and to erase its installation family housing shortfall in ten years — instead of the 30 years projected for “doing things the way we’ve always done them.”

The tools in the Military Family Housing Act are designed to:

- Encourage the private sector to invest money in the renovation and construction of soldier family housing.
- Increase privatization of family housing operations and maintenance.

One tool in the Army’s box is the DoD Housing Improvement Fund, a revolving fund of no-year money which is DoD’s share of the investment in these public-private partnerships. DoD has received \$22 million in this “seed” money to:

- Finance the government’s share of any investments in family housing renovations and new construction.
- Collect the Army’s share of any profits that are made by public-private sector partnerships.
- Insure the private sector’s investment in family housing renovation and construction against such adverse government actions as BRAC closures, extended deployments and so forth.

The legislation also gives installations authority to reprogram Military Construction money into the Housing Improvement Fund. Commanders can

use the Housing Improvement Fund to leverage scarce installation dollars to get the most quality family housing their money can buy.

The Army has nominated seven installations to participate in the fiscal year 1996 program, including Forts Carson, Hood, Bragg, Campbell, Huachuca, Eustis and Sill, according to Don Spigelmyer, Chief of the Army Capital Ventures Team. In the next several months the team will visit each of these seven installations, brief the installation’s leadership on how the Army’s new tool box of incentives might benefit their soldiers, and attempt to sell the concept of public-private partnerships to local business leaders.

The team will try to get the installation involved with the local Chamber of Commerce, city and state governments, real estate and homebuilders associations, and so forth. Their goal — to foster a dialogue between the installation and the surrounding community that will lead to the creation of a public-private investment partnership. If the team can convince the installation and the surrounding community to create such a partnership, the team will develop a business plan to implement this partnership that will best suit the needs of both partners.

The team must brief each installation’s business plan to the Army leadership, and each proposal must be approved at the Secretary of the Army level.

An important “tool” in the Army’s “box” is the legal authority to insure the private sector’s investment. The Housing Improvement Fund is not only the Army’s share of the investment in the public-private partnership, it also insures the private sector’s share of the investment.

The legislation also allows the Secretary of the Army to make contractual commitments with the private sector, including:

- The Secretary may enter into a contract for the lease of new and renovated family housing units, with the Army paying the rent. The contract may include provisions for private sector operations and maintenance of the units.
- Since the soldier will only be paying BAQ and VHA, the Secretary may enter into a contract that commits the Army to paying the differential between what the soldier pays and the private sector’s profit margin. This differential is negotiable.

Finally, the legislation gives the Secretary authority to invest Army dollars in limited partnerships between the Army and the private sector. The installation may invest its own land in the partnership; when land is included in the installation’s investment, Army’s share can go as high as 45 percent. Otherwise the Army’s share of the investment would be limited to 33.3 percent.

A limited partnership would function as a business. The private sector partners would manage that business, including all renovations, new construction and operations and maintenance of the family housing units, Spigelmyer said. But as a major investor in the partnership, the installation would have the same degree of control over management actions and policy that a major investor in any other private-sector business partnership would.

The public-private partnerships would not be subject to MCA building codes, but could use local private sector building standards for renovations and construction of family housing. The Army would be able to outlease or sell land without McKinney Act restrictions or GSA involvement.

According to Spigelmyer, the legislation has a “sunset clause” and will be reevaluated at the end of five years.

☎ POC is Don Spigelmyer, Engineer Strategic Studies Center, (703) 355-2114 DSN 345. **PWD**

*Richard Brown is a public affairs specialist in the Customer Relations Office of CPW.*



# Homeowners Assistance Program eases the hurt for BRAC communities

by Penelope Schmitt

When BRAC shuts down all or part of a military installation, communities can feel economic pain for several years. Homeowners are especially vulnerable to losses. The Homeowners Assistance Program benefits military and civilian homeowners who must relocate. The program also helps the local community by lessening the impact of base closure and preventing an epidemic of foreclosures.

## What is HAP?

"The program was first authorized under the Demonstration Cities and Metropolitan Development Act of 1966," said Connie Ledford, an attorney with the Corps of Engineers, Savannah District. "The recent round of major base closure actions has caused us to go into high gear to put the Act to work."

The program encourages owners to make strong, active efforts to sell their homes. But if owners can't sell in the local market, the government will buy their homes at 75 percent of the pre-BRAC appraised market value or the balance of the mortgage, whichever is greater. If they sell at a loss larger than 5 percent of their home's pre-BRAC appraised value, the owners receive compensation for up to 95 percent of the pre-BRAC appraised value of the home.

"We are as generous with the homeowners as we are able to be," said Mark Moore, Real Estate Acquisition Chief at Fort Worth District. "We interpret the law liberally. We consider that we are there to help people."

The program is administered by the US Army Corps of Engineers' Savannah, Fort Worth and Sacramento Districts. The Districts have been designated by the Department of Defense to

handle the program for all DoD and the Coast Guard, both in the Continental United States and overseas.

The Corps of Engineers is especially well-suited to take on the complex business of intervening in a housing market. "We have real estate specialists ourselves, and we are set up to work with appraisers, attorneys and local and national real estate businesses," Ledford explained.

Because of the Corps' extensive experience with real estate and land negotiations in overseas and theater-of-operations situations, the Corps can also help people who own property near closing overseas bases. "We have completed two Housing Assistance Program projects in England and have an active program in the Azores Islands," said Linda Fountain, Chief, Acquisition Section. "In those areas, the program can't buy the US owner's home, because the Federal Government can't acquire overseas property. But we can pay benefits to the owners for losses incurred as a result of base closure."

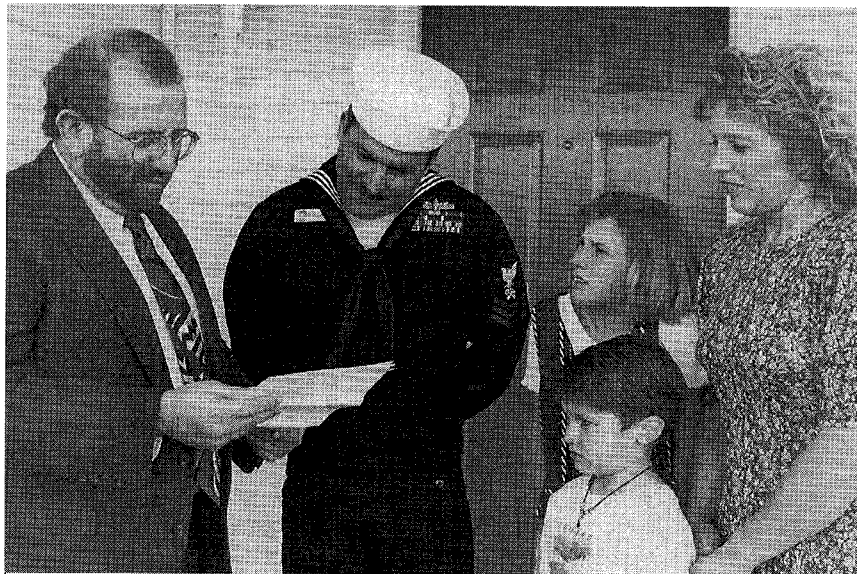
## How does a military community get Housing Assistance Program services?

"Installation Commanders and DPWs don't have to take any action to initiate Housing Assistance Program services," explained Jim Simpson, Chief of Savannah District's Management and Resale Section. "Savannah District handles all actions in Europe and east of the Mississippi River. When a community in our region is listed for base closure, we automatically start to monitor that real estate market on a quarterly basis. Of course if commanders have a concern about their community and ask us for help, we respond."

Mark Moore of Fort Worth District agreed.

"As soon as there is a BRAC or reorganization announcement, we make contact. At the same time we go ahead with a preliminary impact report. Our own Real Estate Specialists conduct that study. That could lead us to say there's no action needed, to continue to monitor, or to say, it's time to start a program right now."

When a need is identified, Commanders, DPWs and Housing Offices become vital partners in the process. When monitoring shows potential impact on the local market caused by the government's base closure or other downsizing, the District's HAP staff brief the Installation Commander and staff. They work with the Commander, the DPW, and the Housing Office to ensure the community knows about the Housing Assistance Program and its potential benefits.



*Ricky Lewis, a Navy 1st class petty officer from Charleston, discusses the closing on his house with Greg Monroe, chief of Savannah District's HAP Center, as Lewis' wife and children look on. (Photo by Jonas Jordan)*





"We will go back to the installations as many times as they need us to," Moore said. "Jean Dillon, our Fort Worth District HAP program manager, is at Fort Polk today. They have a couple of units moving out, and we are working with them. We will brief the Installation and Garrison Commanders, and the DPW. If a HAP goes into effect, we will, train the Housing Office and hold town meetings to make sure the people who are affected understand the program."

The Housing Office staff are a natural focal point for informing the community about the program. "That's where partnership with the installations comes in," Simpson said. "Savannah District works very closely with the Housing Office. We ask them to have people who are leaving the area complete applications, and keep them on file with records of forwarding addresses."

That's an important task, according to Simpson. Housing Office record keeping helps insure people remain eligible for benefits even if a program isn't in effect when they leave the area. "Our monitoring continues until we know the closure did or didn't affect the market. Sometimes compensation becomes available up to two or three years after people have moved," he explained. "Housing Office records have made it a lot easier for us to contact people with the good news that we have an approved program."

## How effectively does HAP help homeowners?

"Base closures in Charleston have been our biggest action to date," Simpson said. "In that community, we worked with four managing brokers, who had about a thousand houses on the local market for most of the duration of the program." Home sales are handled by putting properties on the market through the local multiple listing service.

The closing installations' Housing Offices helped greatly, according to the HAP staff, who tailored a mission liaison with the local Housing Office. "They provided meeting rooms and let us use their office equipment. We relied on them for help and a lot of administrative support," Simpson said.

Fort Worth District has also been busy with HAP. The district handles all actions for states from the Mississippi west through New Mexico, Colorado, Wyoming and Montana. "At one time, we were running programs for the communities around Carswell Air Force Base, Edgar Air Force Base, and Eglin Air Force Base. Our attorneys were busy with closings. We definitely saved a lot of people's credit," Moore said.

Homeowners who benefitted from the program testify to the quality of HAP's assistance.

Sonia Watt turned to HAP when two sale contracts fell through at the last moment. "We would have preferred

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a private sale," she said, but "we were certainly grateful for this program as an alternative solution."

Jimmie L. Yawn emphasized the service he received: "Your positive attitude is a big relief, especially in dealing with items that have such a large impact on people and their personal lives."

"HAP does not protect people from all losses, but it certainly keeps families from experiencing serious credit problems and financial devastation," Ledford said. "We enter markets that have lost at least five percent of their appraised market value due to BRAC. Program participants will feel some of that impact. But at the same time they don't lose the entire value of their home. And they are not forced to keep paying the mortgage on an empty, unsaleable house while paying for housing in their new community."

Donna Williams, who moved cross-country to Silverdale, Washington, summed up the bitter and the sweet of the program for beneficiaries: "It is difficult to fill a home with life and love and then vacate, giving it to the government at no profit. However, we do appreciate not having to leave the property vacant while continuing the financial responsibility."

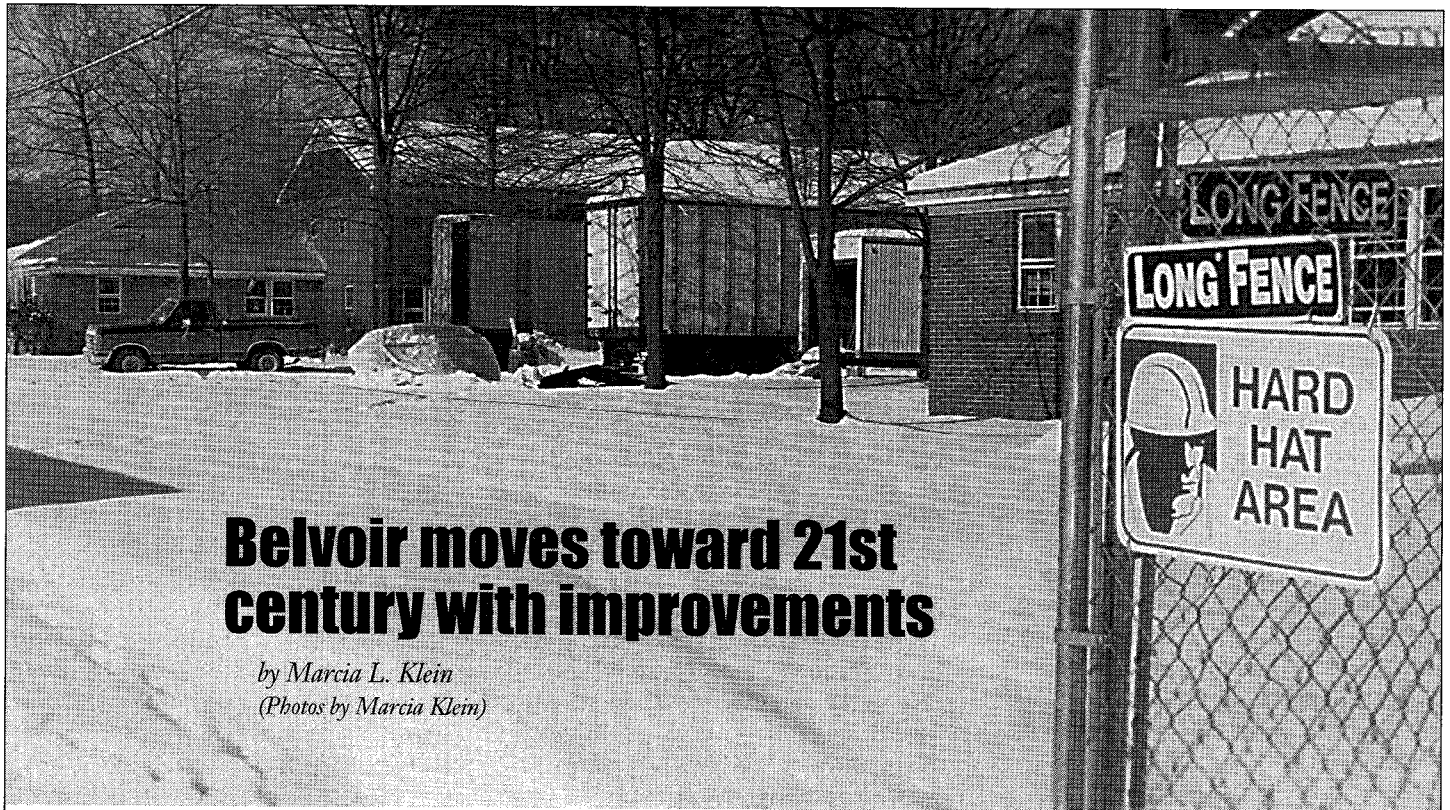
☎ POCs are: Fort Worth District: Jean Dillon, (817) 334-4048; Savannah District: Greg Monroe, (912) 652-5705; and Sacramento District: Mary Jorgenson, (916) 557-6909. **PWD**

*Penelope Schmitt is the chief of the Customer Relations Office at CPW.*

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## Belvoir moves toward 21st century with improvements

by Marcia L. Klein  
(Photos by Marcia Klein)

*Work continues to gut and replace the insides of Dogue Creek quarters in Phase I of the revitalization effort for the housing area.*

Physical improvements planned for Fort Belvoir, Virginia, through the end of the decade run the gamut from housing/barracks upgrades to community activities improvements to Base Realignment and Closure moves, according to information provided by Belvoir's Directorate of Public Works.

A number are either already underway or in the design phase, but quite a few are still in the "wouldn't it be nice to" stage.

Projects already underway and nearing completion include the stretch of the Fairfax County Parkway from U.S. Route 1, north of Telegraph Road. Funding and land for that portion of the roadway came from the Army, while the Virginia Department of Transportation is handling construction. When completed, the parkway extension will include a connection to Kingman Road, facilitating travel to and from the Headquarters Complex building, housing Defense Logistics Agency headquarters and others.

Scheduled for completion in the fall

is the first phase of the revitalization project for Dogue Creek Village. Currently 73 units are being completely gutted and fitted out with new windows, doors, appliances, facade improvements and natural gas. The second phase has not yet been funded. If approved, Phase II will include plans to enlarge some Dogue Creek quarters to three and four bedrooms and to provide bungalow units designed for exceptional family members, according to LTC James Hayes, DPW director.

A major renovation of the Commissary, currently ongoing, is scheduled for completion this summer (see page 8). The renovation will add 18,000 square feet of sales floor space to the facility.

The \$2.2 million dollar convenience/gas station/Class VI project is now in the site-clearing stage. Hayes said completion is scheduled for early fall.

Among the major projects currently under design is the third phase of an eight-phase project to upgrade the electrical distribution and delivery system postwide. The \$5.1 million third phase

is among the biggest of the upgrades and will provide "substantial improvements to the electrical distribution system on both North and South Posts," according to Hayes.

The design is nearing completion for the largest elementary school in Fairfax County. When complete, the 1,500-student school will replace the three existing elementaries on post. Officials hope to start construction on the \$14 million facility this fall, with a planned opening for academic year 1998-99.

Due to 1993 Base Realignment and Closure decisions, the Operational Security Evaluation Group (OSEG) will move from Vint Hill Farms, which will close, to Fort Belvoir. The redesign for the OSEG facility is almost completed, and the approximately 45,00 square foot project should be advertised for bids in March, Hayes said.

Major sewer repairs are planned for Gerber Village and the 300 building area, although a specific start date has not been set. Hayes said the repairs





will reduce the infiltration and intrusion of water into the sewers. The addition of water into the system can result in higher sewer fees, which are calculated by volume.

Now in the programming phase is the planned on-post construction of an approximately \$1 million ammunition bunker, to provide storage for such units as the 437th Military Police Company. Ammunition and small arms are currently stored at the Engineer Proving Grounds, which is under evaluation for future disposition by the Department of the Army.

Also programmed is a move by the Concepts Analysis Agency, required by BRAC '95. A new facility will be built for that agency, and the project is estimated at about \$7 million, according to the DPW.

Several projects are planned using Non-appropriated Funds, but they have not been approved to date, according to

Hayes. Included in those projects are a \$1 million, six-lane expansion of the Bowling Center on South Post; the enclosure of the outside deck at the Officers' club, which would allow it to be used year-round; and a modernization of Benyaurd Indoor Pool to include more recreational facilities.

Projects for FY 99, which have been submitted to the MACOM to be forwarded to Headquarters Army, include barracks improvements here and at Fort A.P. Hill. Hayes said those renovations would bring existing barracks up to new Department of Defense standards. Also included for that fiscal year is a proposed \$4.5 million Military Police station near the fire station. Hayes said that would enable the MPs and Provost Marshal Office to move out of the cramped, older wooden building they currently occupy.

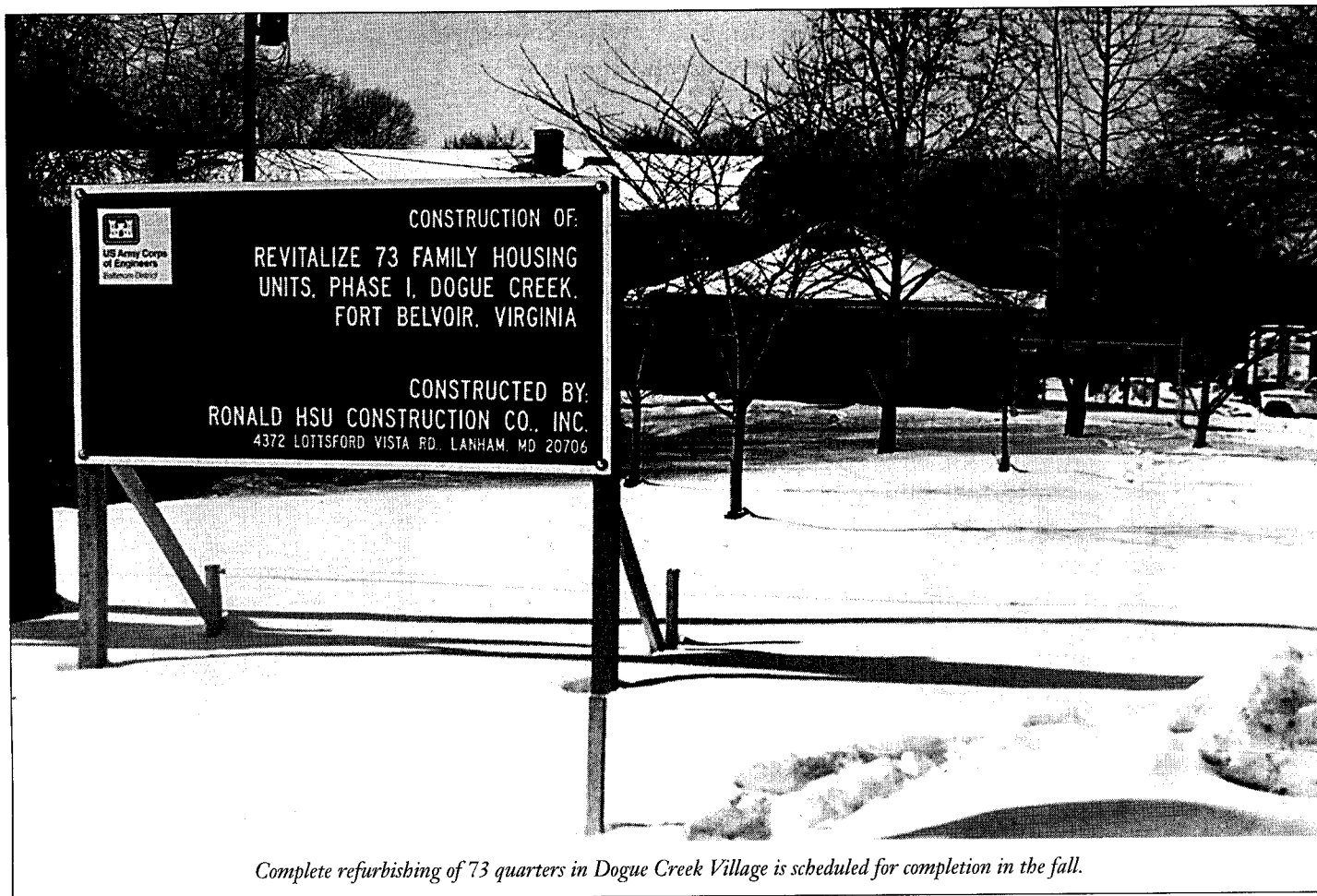
Programmed, but not currently slated against a fiscal year, are plans for a

new 600-seat chapel, to be located across from the Commissary on North Post; and hopes to renovate Barden and Markham elementaries as adult education and administrative facilities once they are vacated when the new school opens. Cheney Elementary is scheduled for demolition. Officials would also like to replace the old fire station on Davison Army Airfield, to provide more up-to-date firefighting capability on the airfield.

Finally, post officials hope to continue road improvements on both North and South posts and add storage facilities to some housing areas.

☎ POC is LTC James H. Hayes, Headquarters, Fort Belvoir, Director of Public Works, (703) 806-3017 DSN 656. **PWD**

*Marcia Klein is a staff writer for the Belvoir Eagle.*



*Complete refurbishing of 73 quarters in Dogue Creek Village is scheduled for completion in the fall.*



## Belvoir Commissary upgrade impacts patrons

by Lawrence Morahan  
(Photos by Lawrence Morahan)

From now through the end of summer '96, the Fort Belvoir Commissary will undergo its most thorough structural overhaul since the facility was opened in 1982.

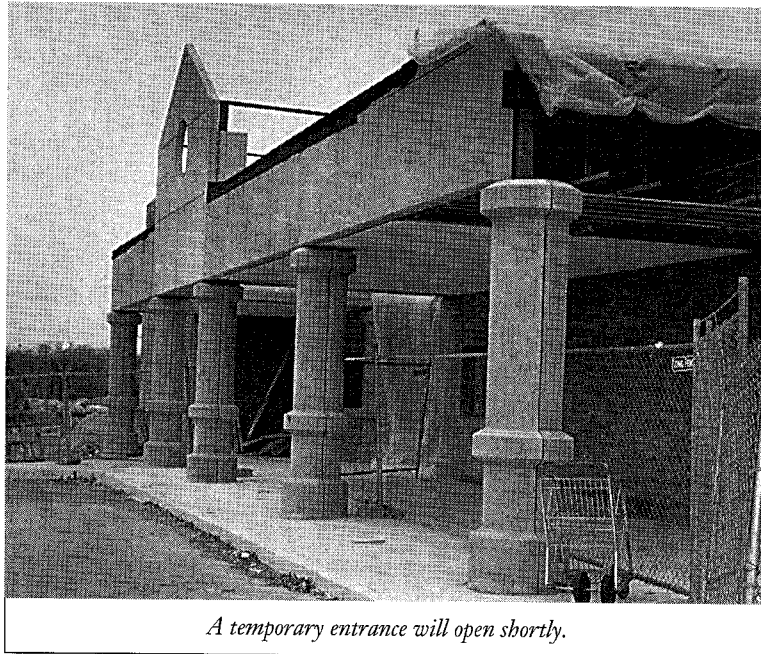
"It will be a completely renovated footprint of the old store," said George Matthews, customer service manager. "Refrigerated cases will be expanded and upgraded to make them more energy efficient and more accessible to customers," Matthews said.

The commissary management cautioned, however, that the renovations will not be carried out without some inconveniences to shoppers.

"Until now, the overhaul has been almost transparent to our patrons," said Edward Bizet, commissary officer. "But from now on, our customers will be more impacted. Sections will be moved around and customers won't find items where they used to find them."

Bizet emphasized that the management is doing everything it can to make shopping as pleasant as possible while the work is being carried out.

Hours of operation will not be affected," he said. "We've added some



*A temporary entrance will open shortly.*

100 new parking spaces, and post authorities will change traffic patterns for exit and entry to provide patrons with better access."

Work is currently underway on the main commissary entrance. "In about four weeks, we will open a brand new produce section," Bizet said, "and a temporary entrance at the west end of the building. One immediate benefit is

that shopping carts will be stored inside from now on."

The renovation of the sales floor is the final phase of an 18-month project that was begun in January 1995. The conversion of 18,000 square feet of warehouse space to sales area is almost complete, resulting in the addition of five new grocery aisles.

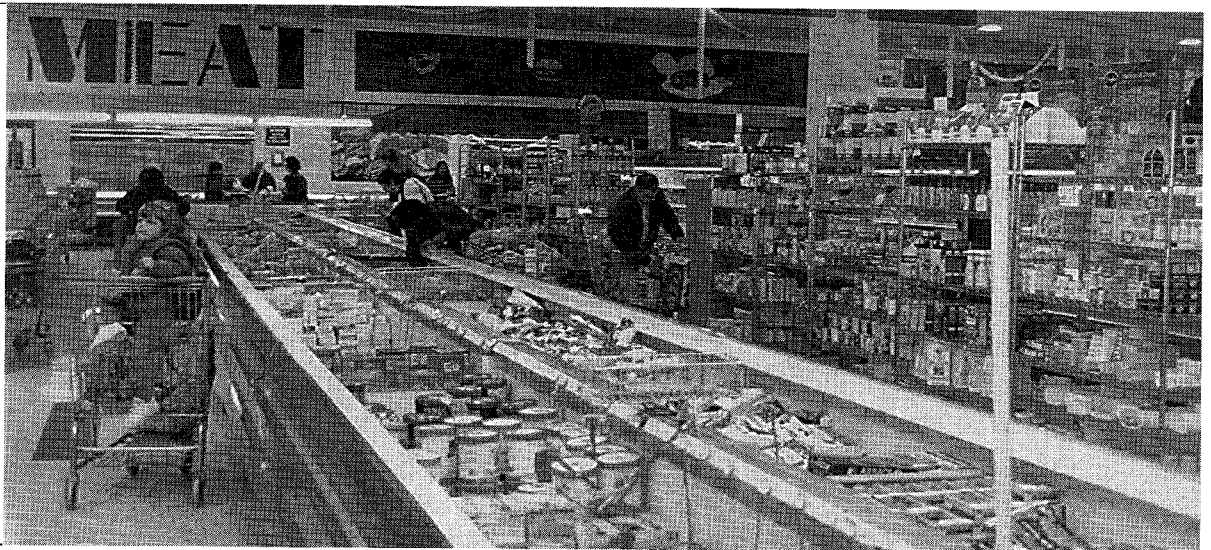
The renovation of the existing sales area is scheduled to begin in April. "This will be the most disruptive phase," said Matthews. "It will be carried out in four steps in order to minimize inconvenience to shoppers. For example, we won't begin a second step until we have completed the first, and so on."

The work is being carried out by the Ronald Hsu Construction Company at a total cost of about \$9 mil-

lion. "When the commissary is finished, the inside will be completely new," Matthews added, "and the exterior will have a sand-finished, Southwest look." **PWD**

*Lawrence Morahan is a staff writer for the Belvoir Eagle.*

*Refrigerated cases will be upgraded to make them more efficient.*



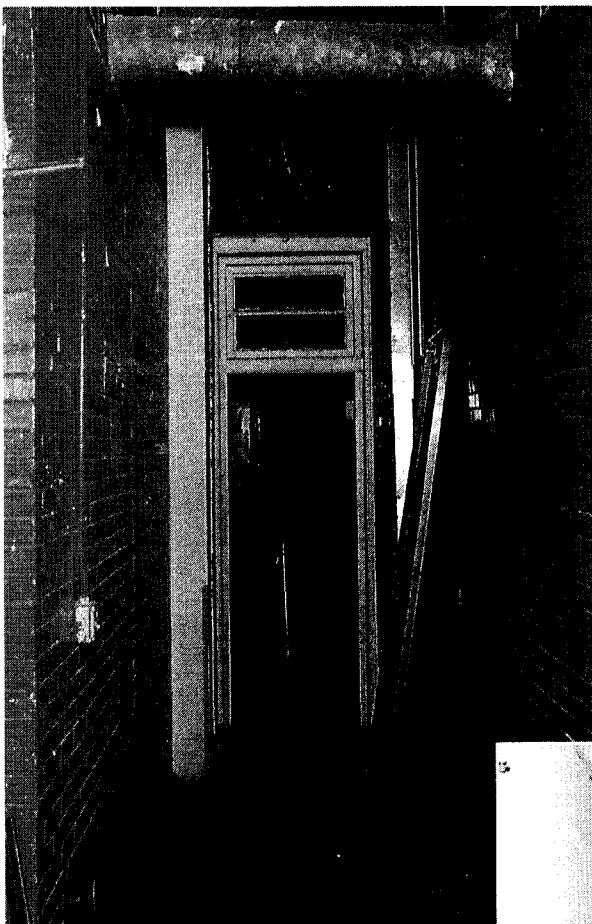


## Selridge's Lufberry Hall Annex gets facelift

**A**fter months of renovation and construction activities, a local visitors' billeting facility annex at TACOM's Selfridge ANGB in Michigan opened its doors to visiting service members last October.

Lufberry Hall, known as visiting officers quarters, was built in 1930. In 1957, it was increased by some 1,000 square feet by enclosing the outer porch, and became known as the Annex. The new space was originally used for storage, as a cool room for meat and a wine cellar. With the improvement of refrigeration facilities, the installation used it for general storage, until it became an eyesore.

What does one do with an eyesore? According to Morale, Welfare, and Recreation personnel, there was a need for a fitness center, laundry room, and a snack room to better serve visitors to the billeting facility.

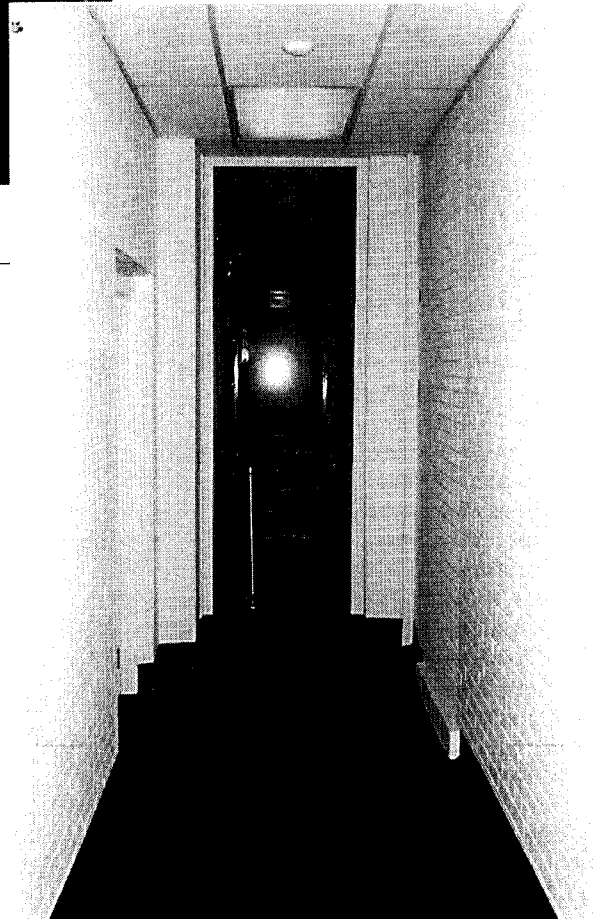


*A Lufberry Hall hallway before (above) and after (right) renovation.*

In a combined effort between MWR and the local Department of Public Works, a plan was developed to resolve the circulation and usage requirements for the above area of the annex.

The idea was to retain and restore the original looks of classic revival architecture, such as the magnificent fan-light windows, internal colonial doors and windows and high ceilings. An excellent solution was achieved using appropriate materials, colors and carpets. An artistic touch of select decor, pictures, and hanging plants greatly contribute to the feeling of excellence.

According to staff architect Robert Nehaniv, despite declining resources, this effort confirms that the Selfridge DPW continues to pursue high quality-of-life standards for its service members. **PWD**



## CPW phone numbers change

**P**hone numbers for CPW personnel located in the Kingman Building at the Humphreys Engineering Center have changed, effective 20 February. Please make the following changes to your U.S. Army Worldwide Public Works Roster for December 1995 to reflect the new phone numbers:

Edward Watling, Director, USACPW ..... (703) 428-6300  
Ollie Smith, Acting Executive Director, USACPW .... (703) 428-6300  
Charles Williams, Counsel ..... (703) 428-8160  
Penny Schmitt, Chief, Customer Relations ..... (703) 428-6933  
Peter Sabo, Director Facilities Management ..... (703) 428-8209  
Tony Vajda, Chief, DPW Management Division ..... (703) 428-6463  
Alladore Csontos, Chief, RPMA Analysis Division ..... (703) 428-7390  
Leo Oswalt, Chief, Business Improvement Division .... (703) 428-7120  
Jerry Zekert, Chief, Planning & Real Property Div. .... (703) 428-6139  
Ed Vogel, Acting Director Resource Management ..... (703) 428-8918

The new DSN prefix for the Kingman Building is 328. **PWD**



## Fort Lee facilities blossoming

by SSG Jim Bolton

Fort Lee's future can be measured by the number of cement and steel-framed facilities blossoming throughout the installation.

LTC Carla Coulson, director of Public Works, said that everyone will benefit from the current construction. "There's no doubt about that," she said. "We have some state-of-the-art facilities being built here."

Coulson includes such new facilities as the Petroleum Training Facility, Automated Supply Training Facility and the Noncommissioned Officers Academy Training Facility, among others, in this category. "In addition, with all the family housing and barracks projects going on, we're definitely looking toward the future," she said.

Nonetheless, these projects are just the tip of the iceberg when it comes to on-post construction.

A new 104,000-square foot post exchange facility should be completed in October 1996. The \$7 million facility is being funded by the Army and Air Force Exchange Service, in Dallas.

The new PX will house a retail sales area, food court, pharmacy, storage space, administrative area, mall area, rest rooms, space for commercial travel services and automatic teller machines. A covered walkway will join the PX and commissary facilities.

According to Greg White, deputy director of Public Works, plans also call for the renovation of the old PX facility. Some food concessions, the Military Clothing Sales Store, a garden shop and a furniture store will remain in the old store.

Construction on the Noncommissioned Officers Academy Training Facility was completed in January 1996. This facility consolidates training which took place in many World War II-era

buildings on post. "The older buildings which were previously used for classroom studies will eventually come down," said White.

The "Blockhouse," building 1109, Heating, Ventilation and Air Conditioning renovation project is underway. A \$2.4 million contract was awarded last summer. Contractor employees are working on two floors at a time, beginning with the bottom two.

An underground electrical project is also underway. The current above-ground system is antiquated, and new construction standards have more and

more electrical lines being placed underground.

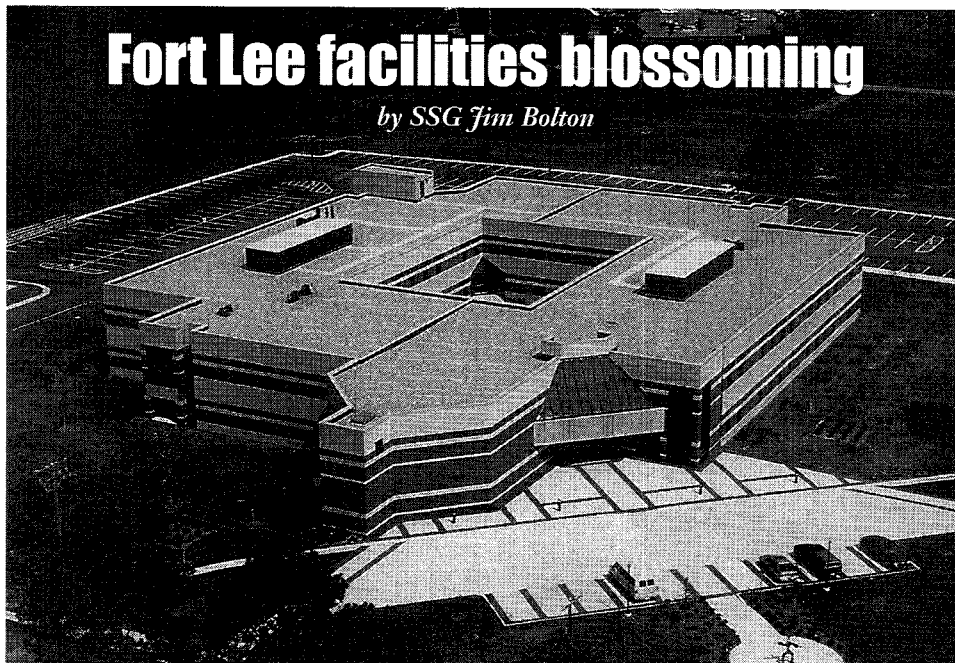
Similar work has already been completed in Fort Lee's family housing areas. The new project should take care of the majority of the installation, he said.

The 120,000-square foot, \$11.4 million Automated Supply Training Facility will include warehousing space and classrooms for advanced individual-training supply specialist course

instruction. Tentative construction completion is slated for late November/early December.

Work is progressing on renovating the water towers located throughout the installation. Considering new Environmental Protection Agency guidance, the contractor is working to remove as much of the lead-based paint initially used on the structures as possible. They will be using a new process to encapsulate any remaining lead-based paint.

Work has begun as part of the Jackson Circle housing area replacement



*The recently completed Petroleum Oil Laboratory (POL) Training Facility.*



*The NCO community—barracks, training facility and physical fitness center.*





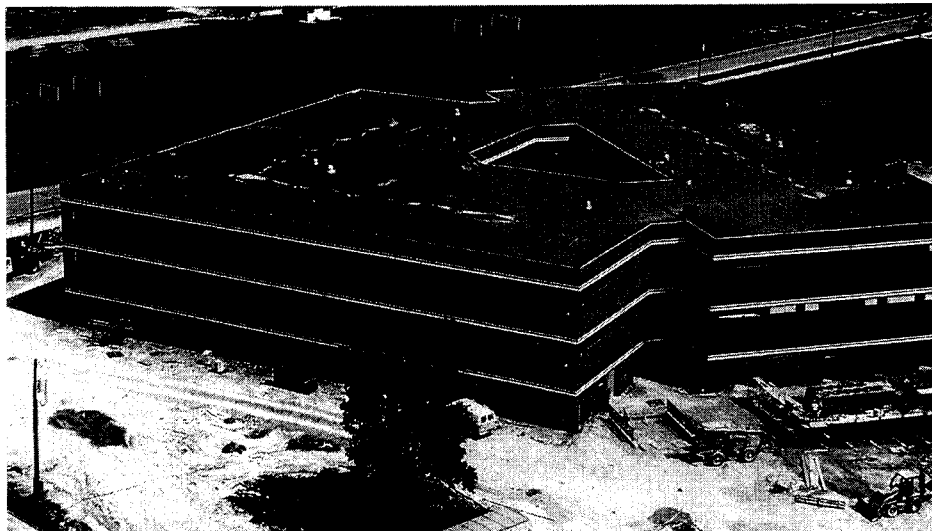
project—a contract to demolish 96 units has been awarded. According to White, some asbestos and lead-based paint originally used in the housing units still remain, and although not harmful to residents, will remain a worker safety issue as dust and debris are stirred up.

Post officials are waiting to see if FY 96 funding on a similar replacement for Harrison Villa will be approved by Congress. If approved, 135 new housing units will be constructed on virgin land. Demolition of an existing 135 units will occur following completion of new construction. Later phases of the project will construct another 135 units on the current housing area site.

As part of a whole barracks renewal project, two old advanced-individual-training barracks, are being renovated. Based on guidance provided by new Army standards, no command-and-control activities will be housed in the living quarters of single soldiers.

To accommodate command-and-control and administrative operations, a new battalion headquarters facility and six company-level administration facilities are being constructed adjacent to the barracks.

Once the renewal project is com-



*The new Automated Supply Training Facility. (Photos by Fort Lee Master Planning)*

plete, soldiers will be housed in renovated rooms with balcony access, similar to modern motel facilities. Current plans, according to White, include housing noncommissioned officers in single rooms while junior enlisted soldiers will be housed in two-man rooms.

Also on the planning boards is a new soldiers One-Stop facility. The planned 32,000-square foot facility, at an estimated cost of about \$4.6 million, would

house Adjutant General Division functions currently taking place in three different facilities on post.

☎ For more information on Fort Lee's projects, please call Greg White, deputy director, Directorate of Public Works, (804) 734-4015. **PWD**

*SSG Jim Bolton is a photojournalist with the Traveller, the weekly newspaper of the U.S. Army Combined Arms Support Command and Fort Lee, Fort Lee, Virginia.*

**F**ort Lee is beautiful. That's the verdict of the 1995 Keep Virginia Beautiful competition after the installation placed first in the state and federal agencies category of the 1995 Keep Virginia Beautiful competition.

"People have a good feeling when the post is neat and clean. It seems like they are happy to come to work and live here," said William E. Vaughan, Directorate of Public Works' Environmental Management Office chief.

Since 1992, Fort Lee has placed in both the Keep Virginia Beautiful and Keep America Beautiful competitions. That year, the installation won first place in both competitions and has been a finalist every year since. The installation has done this even after the state and national competition categories reorganized so that military installations could compete with all state and federal agencies.

Fort Lee was recognized as a leader

## Fort Lee ranks first in 1995 Keep Virginia Beautiful Competition

*by SSG Jim Bolton and William E. Vaughan*

in environmental stewardship when it was listed in Renew America's "1995 Environmental Success Index" as one of the top 1,600 programs nationwide.

Fort Lee meets its environmental mission through the use of military volunteers, various contractual methods and numerous other groups within the military and civilian community.

Volunteerism around the post is re-

flected in numerous beautification projects, construction and daily landscaping activities. "Winning (Keep Virginia Beautiful) is recognition from our peers about all we're doing," Vaughan said. "It's a total team effort that everyone can be proud of, especially the post environmental and beautification teams and family housing occupants."

In an open letter to the Fort Lee community, MG Thomas W. Robinson, Combined Arms Support Command and Fort Lee commander, said "The first place finish in the federal and state agencies category is indeed complementary of all the hard work, especially given the caliber of the competition. The attention to detail is evident in all areas of the base. The entire program from the Housing Beautification Program, police areas and adherence to standards in the design and landscaping of new construction points to a total team effort." **PWD**





Ever wonder who's on the other end when you place a call to CPW?  
Each month **Public Works Digest** will feature several CPW employees.  
Let us know if there's someone special you would like to see here.

# CPW Profiles

by Alexandra K. Stakbiv, editor, **Public Works Digest**. (photos by Richard Brown)

## William Sugg — DPW Management Division

**W**illiam ("Bill") Sugg has been with CPW for many of its reincarnations. He started out with the Facilities Engineering Support Activity (FESA) in 1982, working on the redesign of IFS. He left for a five-year stint in Germany, becoming chief of the Engineer Resources Management Division in Munich, and then returned to the Engineering and Housing Support Center (EHSC) to work on the development and deployment of IFS-M and the IFS-M Supply System. After a year as chief of ERMD at Fort Meyer, Bill again returned to CPW, this time in the work management arena.

Bill's roots have always been with the installations. As a member of CPW's Work Management Team, his focus today is to provide installations with work management support.

"My job is to make automated systems, publications and policy guidance relate the real-world problems that DPWs face and to give them specific answers to these problems," says Bill.

"I see the Center for Public Works as an installation advocate who understands and cares about installation problems and provides assistance in resolving those problems. DPWs can't get discouraged and give up when they have what seem like insurmountable problems. Call on me and together we'll find solutions!"

Bill acts as a liaison officer with the Office of the Assistant Chief of Staff for Installation Management (ACSIM) and installations. He works very closely with installation representatives to

make sure the ACSIM is aware of any issues that come up as a result of Business Practices Committee meetings, CPW staff assistance visits, or telephone calls directed to his team.

"In this way, any new policy or guidance can address these issues," says Bill.

"We can often avoid 'reinventing the wheel' by using innovative ideas employed at other installations or the solutions that come out of our discussions and interactions."

Assistance requests to Bill can range from a DPW looking for an automated key control system to Kwajalein personnel asking for assistance in structuring their management and utility plant SOOs (Standing Operating Orders).

Another facet of Bill's job is heading up the development of the Installation Executive Information System (I-EIS). This will be an automated review and analysis system that is flexible, easy to access, and allows the user to drill-down to more detailed levels of data from initial, summary-level screens. "The database is similar to a Windows-based application," explains Bill, "and it will help HQDA, MACOMs and installations analyze their real property inventory and RPMA cost data."

He's also in charge of the effort to provide detailed SOPs (to include work-flow diagrams and performance indicators) for the work management functions outlined in DA PAM 420-6.

Bill enjoys canoeing along the Shenandoah and hiking in the Blue Ridge Mountains. You may reach him at (703) 428-6338 DSN 328. **PWD**



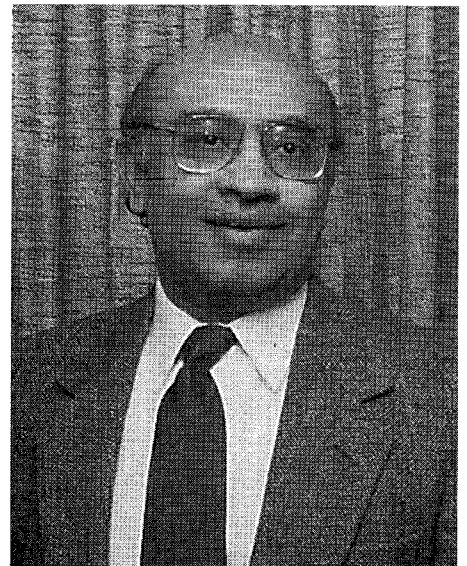
## Harry Goradia —

**B**orn and raised in India, Harry Goradia came to this country in 1967, already equipped with a diploma in electrical and mechanical engineering. He completed the program for a mechanical engineering degree at the University of Nebraska in 1969 and continued with graduate studies in electrical engineering while working for the local electric utility. From there, Harry was hired by the No. 1 ranked architect firm in the nation, Gilbert/Commonwealth Associates, to work on electrical substation design. He traveled extensively to such places as Iran, Sweden, Syria, Brazil, Bangladesh, Argentina, Bolivia and Saudi Arabia.

In 1983, Harry left the private sector to join FESA, which was primarily a technical organization at that time. He provided technical assistance, performed system studies and troubleshooting services for installations. When EHSC was formed, he was assigned to Prime Power, where he was instrumental in preparing the power barges Weber and Impedance for sale, ensuring all PCBs and hazardous materials were removed and the barges were seaworthy.

Harry returned to EHSC after a six-month stint with the Air Force to become the chief of the Military Engineering Division for several years.

Today, Harry is the acting chief of the Mechanical and Energy





## Evangelos Stoyas — Electrical Division

### Mechanical and Energy Division

Division, responsible for providing technical assistance for the Army Energy Program and troubleshooting for installation mechanical utility systems.

His pet project is managing the Energy Managers Training Program. Harry is the proponent for the PROSPECT course for energy managers, which was offered eight times last year. Installations must, by law, provide training for their managers and Harry decides how installations will meet that requirement.

Harry still travels a lot. Next month, he's going to Korea to teach a segment of the PROSPECT course to energy managers. Harry will explain how the Army Energy Program works and how to put a good package together to get FEMP funding. His advice is a must because competition is stiff, with about 700 projects submitted annually. This class will allow some Air Force personnel to participate free of charge, courtesy of Harry, who keeps in close touch with all the services.

Harry also arranges specialized training such as the upcoming life-cycle cost training course at Heidelberg, Germany. Thanks to Harry's efforts, CPW is funding this course for USA-REUR. "I am very proud of the fact that people feel comfortable enough to use me as a sounding board for their prospective energy projects," says Harry. For example, when Aberdeen Proving Ground was trying to get a utility partnership going, the installation called Harry for advice.

When asked to define his job, Harry quickly replies, "I see myself as a clearing house for information about the Army Energy Program. I try to maintain a good relationship with CERL, the Engineering Support Center, Huntsville, Mobile District, HQUSACE and ACSIM personnel, and keep up with everything that is happening in the energy area, so that I can pass it on immediately to the MACOMs and installation energy managers."

An avid bridge player, Harry enjoys reading books about current events. You may reach him at (703) 806-6111 DSN 656. **PWD**

Evangelos "Angie" Stoyas has been providing electrical engineering support to installations for more than 16 years. He has a degree in electrical engineering from the University of Pittsburgh and an MS in electrical engineering (power systems) from the University of Tennessee. Before joining FESA in 1979, he worked as a consultant to private oil companies. Combine all that and you have a unique set of skills and expertise not readily available elsewhere.

As chief of the Electrical Division in CPW's Engineering Directorate, Angie is responsible for electrical engineering expertise in five main areas.

The first area concerns technical guidance. "We are trying to get our O&M manuals updated," says Angie. "We recently published the *Electrical Interior TM*, and next week, we'll publish *Auxiliary Generators*. We also produce an *EE Newsletter* that we send to the installations. We started it in 1987, and today, it's widely read even outside of the Army."

The second area is power system analyses, which are planning system studies done by computer either in-house or by A/E contract. "The most popular of these are the short circuit and protection coordination studies, and we do about four of them per year on a reimbursable basis," says Angie. "They range from 200 to 800 manhours and the average cost is \$40,000."

Angie is very proud of his staff's advanced computer skills. His division was one of the first in the Corps to use a CADD (Computer-Aided Design and Drafting) system.

The third area Angie covers is electrical system testing and troubleshooting for U.S. Army installations and sometimes for countries like Iraq and Turkey, the State Department and

other Corps customers. The worldwide electrical infrastructure studies require sophisticated instrumentation worth several million dollars. Recently, requests for these studies have come through the Winchester Program Center, and they involve checking out

power plant generators for harmonics.

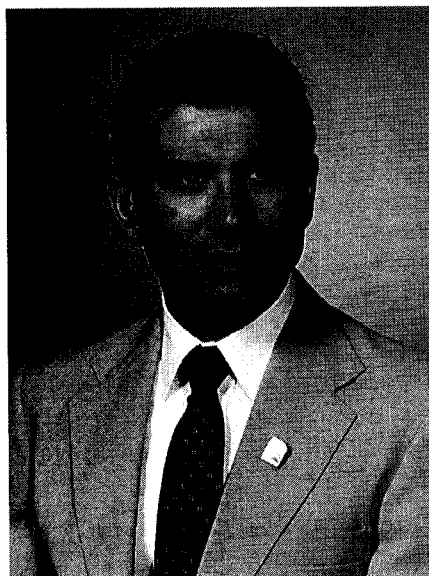
The fourth area is giving support to CPW's Prime Power Battalion in areas such as equipment modernization. This particular responsibility has a familiar ring for Angie. In 1980, as a young engineer with FESA, Angie wrote the specifications for the Fermont generators. They are still being used by prime power personnel today.

The fifth area is providing technical support to the ACSIM organization, which doesn't have any electrical engineers. "We don't put in many hours with the ACSIM," says Angie, "but our support is invaluable to them during technical meetings, when writing or updating Army regulations, and for project approvals."

"I try to anticipate my division needs by knowing what the trends will be," says Angie. "My division produces a book of what we've done in the past year and what we plan to do in the next, and our assignments are based on that."

"As we downsize, I think that the need to know exactly where to go for specialized assistance in the electrical engineering field will become more important. The proliferation of computers and electronic instrumentation will only intensify that need."

Angie plays the piano for relaxation and loves soccer. He has coached seven state champion soccer clubs and works with the Olympic Development Program, which scouts for professional soccer teams. You may reach him at (703) 806-6113 DSN 656. **PWD**





## Win up to \$5,000 using new A/E contract

by Myron Kellberg

The U.S. Army Center for Public Works (CPW) has obtained an Indefinite Delivery Type Contract to provide installations with some of the services DPWs are no longer able to perform themselves due to cut-backs or other restrictions.

MACOMs or installations that choose to use this contract will have to fund delivery orders written against it. However, CPW is offering a little incentive to help publicize the benefits and services available through the contract. CPW will match customer funds, dollar for dollar (up to \$5,000), toward a survey or study initiated by the first three MACOMs/installations to request these services.

The contract offers expertise and assistance in these areas:

- Utility/plant systems operations, including boilers and hot water generators, steam generators.
- Fuel supply, storage and distribution systems.
- Pumps and pumping systems, compressors.
- Control systems.
- Steam and hot/chilled water distribution systems, and chiller/air conditioning systems including heat pumps.
- CFC conversions, refrigerant management plans.
- HVAC systems and their impact on indoor air quality.

The services available under this contract include:

- Engineering studies/surveys.
- Preparation of studies, manuals, reports and SOPs.
- Project development, to include preparation of project documents such as information/documentation for completing DD Form 1391.
- Testing and/or evaluating concepts, systems parameters and utilities/facilities systems.
- Ability to provide Testing/Adjusting/Balancing (TAB) services for energy distribution systems, such as hot water or conditioned air.
- Preparation of one-line drawings of existing systems and proposed solutions using Computer-Aided Design

and Drafting (CADD), Intergraph compatible or AutoCAD compatible format.

- Trouble shooting and expert engineering advice and analysis of components and systems.
- Engineering and mathematical/statistical analyses, evaluations related to utility, facility, equipment and component systems.
- Life cycle cost analyses for recommended projects.

- Analysis of existing O&M procedures, equipment, policies and practices including staffing, training, state of the art and conceptual engineering advances.

☎ To find out if you are lucky enough to be one of the three to win \$5,000 toward an A-E service contract, please call Dennis Vevang at (703) 806-6071 DSN 656. **PWD**

*Myron Kellberg is a mechanical engineer with the Mechanical & Energy Division in CPW's Engineering Directorate.*

## Corrosion control testers can save your installation money

by Cris Sawyer

Would you buy a corrosion control tester that cost \$300 to save a \$300,000 condensate system? It seems like simple preventive maintenance, but sometimes the simplest solutions to problems are the least likely to be implemented. This small investment could save your condensate system from costly repair and outages.

The corrosion control tester consists of a composite pipe assembly of couplings and a set of six rings or shells that fit inside the machined 3/4-inch pipe assembly (other sizes have been used for special cases). The rings are machined and precision-ground to a smooth finish. By piping the tester assembly into the condensate return line in steam boiler systems suspected of high carbonic acid concentration or other problems, an operator can identify corrosion problems in the system or verify that his treatment is correct.

A data sheet is provided with each tester for recording installation and removal dates, plant operating conditions, fluid flows, temperatures, and

other pertinent information. To verify correct sampling, the operator also submits a sketch showing where and how the tester was installed. The testers are then analyzed by a laboratory according to ASTM Procedures.

The corrosion control tester can detect problems in boiler water and condensate chemistry that might otherwise go unnoticed. Being aware of minor problems in water chemistry and taking corrective action before hand keeps many installations from throwing away money through condensate system replacement, energy loss and chemical waste.

To obtain a corrosion control tester, please call Puckorius & Associates, Inc., and ask for Diane Pierce at (303) 674-9897.

☎ CPW POCs are Nelson Labbé, CECPW-ES, (703) 806-5202 and Cris Sawyer, (703) 806-5206 DSN 656. **PWD**

*Cris Sawyer works on corrosion control issues in the Sanitary and Chemical Division of CPW.*



# Battery room safety—a must, not an option

**M**any of today's electronic systems need to operate continuously without any downtime. As a result, battery back-up power systems are on the rise, not only for critical system applications, but for regular office environments that employ personal computers.

Using large banks of batteries protects sensitive electronic equipment such as ADP, communication, medical, and other critical data processing equipment from power outages. The battery systems store energy, and provide uninterrupted power to protect systems from damage or loss of data.

## Photographs help track equipment condition

*by Nicole Lussier*

**T**o ensure installation facilities are operating at their optimum, you must keep accurate records of equipment condition. Photographs are a reliable way to view and track equipment condition and are helpful in targeting deficiencies.

Photographs taken on a regular basis, such as when routine annual maintenance is performed, offer a comparative analysis of equipment conditions over time. These comparisons can be used for:

- Quality assurance of a contractor.
- Quality assurance of functions handled in-house.
- Checking adequacy of contract vendor for services or chemical treatment in utility systems.



Storage space and organization are common problems associated with the use of photography. You can alleviate this problem by scanning photographs of equipment into a computer and storing them on hard disk for future reference. Pertinent data and vendor logs can be kept in the electronic files for better record keeping and ease of retrieval.

Tools such as fiber optic boroscopes and digital cameras can make taking pictures easier. For example, for areas that are difficult to see such as in cooling system condenser tubes, a fiber optic boroscope is a useful tool. It consists of a bundle of fiber optics with an eyepiece and control that can articulate the optics within a pipe or confined space to obtain the proper view point. You can attach the boroscope to a camera to view and record images.

Digital cameras are a better method of taking pictures and require no film. They produce clear images and can be downloaded directly into a computer without scanning.

Installation applications where photographs can be beneficial for equipment condition documentation, especially chemical treatment programs, including cooling towers, condensers, chillers and boilers.

☎ POC is Nicole Lussier, CECPW-ES, (703) 806-5211 DSN 656. **PWD**

*Nicole Lussier works on water issues in CPW's Sanitary and Chemical Division.*

The battery banks have unique characteristics. When a short circuit occurs, a battery can't be turned off and continues to discharge until the current path is destroyed or the batteries are depleted. Lead acid batteries produce explosive hydrogen gas continuously during a normal charge operation. Batteries also generate caustic gases as they discharge, and a small 100kW battery bank may contain between 100 and 300 gallons of sulfuric acid and water.

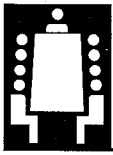
Each of these characteristics creates a safety hazard to both property and life. That's why it's so important to follow these safety rules in the battery room:

- Avoid dead-end aisles.
- Restrict access to authorized personnel only.
- Have two doors available, each with an entry alarm and warning sign.
- Load floors within the safe range.
- Provide adequate ventilation and lighting to meet standards.
- Maintain a clean, dust-free, and low humidity environment.
- Watch for electrolyte leaks on the batteries, the racks and floors.
- Provide an eyewash unit with an alarm horn.
- Use face shields, rubber gloves, aprons, and battery maintenance blankets.
- Use insulated maintenance tools.
- Provide acid absorption and neutralization mats.
- Install battery racks 36 inches apart.
- Keep live battery terminals 48 inches apart.
- Provide cable supports, strain relief, and floor drains.
- Provide spill containment with 4-inch or more raised curbs.

Proper battery installation and a battery room safety list can help avoid accidents. Remember—battery room safety is a must, not an option.

☎ For more information, please contact Anh Vo, CECPW-EE, at (703) 806-5175 DSN 656. **PWD**





## Plug into Corps support... take advantage of technology

### FEAP: Miracles in the details

Ask any DPW—installation infrastructure problems add up to a huge fiscal headache, one breakdown, one staff loss, one resource drain at a time.

"You could say the DPWs are being buried by nickel and dime problems," said Fidel Rodriguez, FEAP program coordinator. "But in their case, the nickels and dimes come in five-, ten- and 50-thousand dollar increments."

FEAP, the Facilities Engineering Applications Program, helps installations solve nagging facilities problems that erode maintenance and repair budgets one detail at a time.

The program finds and applies new technologies that can solve stubborn infrastructure and maintenance problems. Since 1984, FEAP has demonstrated and fielded more than 75 technologies and techniques that help Army installation DPWs operate and maintain their facilities more efficiently.

A growing number of utilities, buildings and grounds, and maintenance and repair chiefs rely on FEAP technologies to prevent breakdowns, make up for lost staff, and improve operations. Last year, installations tapped the FEAP information center at the Corps Construction Engineering Research Laboratories (CERL) 750 times for information about technologies, and asked for 150 videos and 300 guides to help them put FEAP technologies to work.

In FY 1996, the program became a full partnership between the Corps of Engineers and installations, which contributed \$700,000 to match \$750,000 in Corps funding for new technology demonstrations.

What kind of payoffs could lead to this level of commitment from fiscally stressed institutions?

*The U.S. Army Corps of Engineers has a wide array of services and resources available to help DPWs and augment their precious personnel and resources. This article begins a series featuring the many ways Corps Support can help you in your effort to provide excellent DPW services.*

### Avoiding repair costs: Prevent pipe leaks in high temperature systems

A single pipe leak repair can cost \$3,000 to \$5,000. "We have 30 barracks buildings, each with two hot-water tanks," said Frank Cooper, Chief of the Operations and Maintenance division at Fort Jackson's DPW. "Of these 60 tanks, 48 were leaking. That's what prompted me to volunteer for this field demonstration."

The problem? In 1990, environmental rules prohibited use of asbestos gaskets in pipeline systems, due to health hazards. But substitute materials for gaskets couldn't stand the heat. Within a year, 25 percent of new gaskets failed. "The current gaskets have a 100 percent failure rate over time," said Keith Jevons, a mechanical engineer at Fort Riley's DPW. That adds up to an explosion in repair costs for hard-pressed installations.

Through FEAP, CERL identified six types of gaskets made from materials that promise to withstand heat well and give a long service life. "We expect to have results on the effectiveness of each type of gasket by the end of this heating season," said Dr. Charles Marsh, CERL researcher and project coordinator. Keith Jevons has high hopes. "From all the data I've seen so far, I'm hoping for a 95-100 percent success rate in stopping leaks using the non-asbestos gaskets."

☎ POC is Dr. Charles Marsh, (217) 373-6764, e-mail: c-marsh@cecer.army.mil, or Malcolm McLeod at USACPW, (703) 806-6068.

### Get energy savings: Raise the efficiency of motor-driven equipment

Nearly 50 percent of the fixed Army electrical energy consumption comes from induction motor-driven

systems that operate far below their rated load most of the time. CERL projects that the Army energy bill for such equipment could be cut by more than 6 percent, or more than \$40 million each year.

How? By taking full advantage of adjustable speed drivers on motor-driven machinery like fans, pumps, and compressors.

To change system flows from fixed-speed systems like these, mechanical devices have to be used. These throttling devices include dampers, valves and recirculation loops. All of them work by mechanically throttling back the machine—which keeps on using the same amount of energy.

An adjustable speed drive saves energy by controlling the rotational speed of the equipment. To slow the system down, you use less energy.

In FY 1996, CERL will complete a demonstration of the adjustable speed drive equipment at Madigan Medical Center, Fort Lewis, Washington.

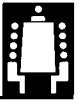
☎ POC is Hannon Maase at CERL, (217) 373-3434, e-mail: h-maase@cecer.army.mil, or Phil Connor at USACPW, (703) 806-6068.

### Make up for lost staff: Expert system takes on preventive maintenance role

Preventive maintenance—that's every infrastructure and system manager's impossible dream.

Or is it? Thanks to FEAP, some preventative maintenance tasks don't have to go downriver with staff losses. Fort Drum's water treatment plant took a five-man reduction, and absorbed





that by installing a telemetry system that could control water operations and monitor water quality. But when more staff hits came, Joe Ogiba, the electrical industrial control technician, feared he

couldn't keep his cathodic protection system.

Now, after taking more staff hits, he has volunteered for a FEAP demonstration. He'll be using stand-alone remote

monitors that feed data from a protected pipe to the telemetry system. The monitors will keep tabs on his CP system.

"If you have a system that tells you what's going on, say, with your chlorine residuals, you can take care of anticipated problems before anything fails—even when you don't have the manpower to take measurements in the field."

The monitors interface data from a protected pipe into the existing telemetry system. Stand-alone monitors check the cathodic protection system's performance. "The monitors allow us to be more fastidious about maintaining our system and correcting deficiencies when the data trend is toward failure, not after it fails," Ogiba explained.

The monitors are especially helpful in Fort Drum's icebound winters, which make manual monitoring all but impossible.

Fort Drum's \$55 million pipeline system costs \$300 a foot to repair. The monitoring system makes sure that cathodic protection in the pipeline remains unbroken, makes up for manpower that just doesn't exist on the installation, and also enables the DPW to verify billing and other data.

According to James Bushman, an expert in corrosion protection, "an effective, simple means for remote monitoring of CP is...the single most important development in the last 30 years of CP advancement. It is the one thing we absolutely need to make these corrosion control systems work as we have always intended."

☎ POC is Vicki Van Blaricum at CERL (217) 373-3771, e-mail: v-vanblaricum@cecer.army.mil, or Malcolm McLeod at USACPW (703) 806-5196.

For information about FEAP technologies, write:

FEAP Information Center  
CERL/ATTN: CECER-TR-PA  
P.O. BOX 9005  
Champaign, IL 61826-9005 **PWD**

## DPW equipment purchases limit raised to \$100,000

by Karl Wolfe

The Capital Investment Limit for DPW equipment purchases has been raised to \$100,000. All *not-centrally controlled* equipment with a cost of \$100,000 and less is now OMA funded. Centrally-controlled items, such as trucks, cannot be locally purchased with OMA funds.

The DPW now has the ability to replace much of its worn equipment, purchasing exactly what is needed on a realistic schedule.

Within the \$100,000 limitation, it is also possible to purchase equipment "lease-to-buy" or "used." Old equipment can even be traded in to reduce cost.

The cost burden for DPW equipment has been rapidly shifting to local "OMA" funding for several years, and this trend will surely continue. This latest raise in the investment limit is the sixth in eight years, rising from a mere \$3,000 eight years ago.

Recognizing that most of the DPW equipment replacement responsibility has moved to the installation, it is very important that some plan be put into place to eventually replace (or eliminate) this equipment. Having all OMA-funded equipment requirements included in the DPW Annual Work Plan is a start. Setting realistic equipment rental rates in IFS-M will ensure the sufficient revenue is collected to maintain and replace equipment.

To minimize the economic impact of equipment operation on OMA funds, DPWs must take steps now to eliminate poorly utilized equipment. Many managers incorrectly believe that old government-owned equipment sitting at the fence is "free." In fact, underutilized equipment is very costly in terms of increased maintenance, poor efficiency, low rental receipts and delays to mission work caused by frequent breakdowns. The use of a short-term rental machine

(or a borrowed machine) for projects and peak work loads is much more efficient and less costly.

Another method of reducing equipment requirements is

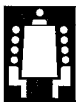
to incorporate multi-purpose equipment, such as hooklift trucks, skid steer loaders and multiple tool carriers, into the fleet. Significant purchase and operation funds can also be saved by purchasing only as large a machine as is needed for the current DPW mission.

☎ For more information on how to implement these suggestions, please contact the U.S. Army Center For Public Works. POC is Karl Wolfe, (703) 806-5996 DSN 656.

**PWD**

*Karl Wolfe works as an equipment specialist in the Pavements and Railroads Division.*

*"DPWs must take steps now to eliminate poorly utilized equipment."*



## DASD gives the big picture on privatization

by Penelope Schmitt

**D**r. John White, Deputy Assistant Secretary of Defense, spoke to DoD Garrison Commanders about the context of change that is affecting their installations at last month's annual DoD Garrison Commanders Conference.

"We are living in a time of vast institutional changes," he said. "As a result, we are reexamining health care, trade...and the military. Even though we have been very successful, the Department of Defense still needs to change. And yes, our past success does make it harder to see why we should do things differently in the future."

White, who served as chairman of the Roles and Missions Commission for DoD, acknowledged that questions about directions and goals haunt everyone involved in the process of transforming our Armed Forces.

"When you predict what the world is going to be like in 15 years, you know just one thing: you will be wrong!" Yet he argued that we can and should formulate a vision for what we want our military organization to be like in 15 years. The Roles and Missions Commission came up with six qualities that should be integral to our military services:

- Truly reliable
- Responsive
- Cooperative (Jointness)
- Competitive
- Innovative
- Efficient

White said the three priorities that rule today's restructuring efforts are Quality of Life, Readiness, and Force Modernization.

The last of these, force modernization, has carried a price tag that will grow from \$39 to \$68 billion. "We have to accomplish this major change. Yet the Defense budgets won't grow significantly. In fact, Defense budgets are universally assumed to go down by Congress. So we have to find the dollars we need to meet that delta. We have to find it through force and civilian reductions, BRAC, and acquisition reform. More needs to be done to make sure we are efficient.

That's why outsourcing and privatization are so important. They are a reflection of what is going on in the private sector, White explained. Service support businesses like FedEx and Telecommunications have blossomed. Why? They signal the corporate world's decision to outsource needed services.

Like major corporations, the Department of Defense has to find ways to reduce

our dependence on ourselves. Depots, maintenance, health care—all provide opportunities to find other sources.

"There are good strategic reasons for doing this," White pointed out. "We are no longer the dominant buyer in the markets we need. Large numbers of companies are not building their livelihood on us. We have to seek the best buy in a very competitive marketplace. Where we once looked to companies like Lockheed and Northrop—the old Defense-Industrial Complex, we are now looking to companies like Microsoft and Genentec."

"So we have to seek out the innovators. We have to ride on the changes when we can't lead them. We have to contract with people who are driven by market change. We can achieve 15- to 30-percent changes by doing this."

## USAREUR is looking for a few good engineers

**T**he drawdown in US Army Europe is over, and they are again recruiting for CP-18 careerists to fill vacancies throughout the command. The USAREUR Civilian Personnel Operations Center (CPOC) is accepting applications for GS-11 thru GS-13 positions through an "Open Continuous" announcement, CPOC-CP-18.

Individual applicants will be rated for qualifications, both grade level and series. An ad hoc panel of subject matter experts will rate applicant qualifications for specific Facilities Engineering Functional Categories. Once applicants are rated, their names will be entered into the CPOC CP-18 database for referral. Based on job requirements, referral lists for specific vacancies are generated from this database.

CP-18 careerists interested in working in USAREUR can obtain a copy of the "CPOC-CP-18" announcement from their local servicing Civilian Personnel Office. Instructions for completing the required documentation and the address

"I have pledged that savings will stay with the services," White said. "This is not a one-year shot, but a way of life. Adopting it will not be easy. But it is critical."

White sketched some initiatives that will help installations make the changes to more business-oriented operations.

- DoD is working to streamline A76 rules.
- Legislative proposals to cut statutory barriers.
- Defense Science Board will give a third party perspective.
- Integrated process team funded with \$11 million in FY 96 and \$22 million in FY 97 to assist with privatization.

"We have to change with the world," White said. "We need all your help and efforts, even though we can't assure that you'll know exactly where you're going. I think of something Daniel Boone once said, when he was asked if he'd ever been lost. "No, I've never been lost," Boone said, "But I was bewildered for about three days once."

We may sometimes feel bewildered by the pace of change, White concluded, but if we stay creative and innovative, we'll be moving in the right direction. **PWD**

for submitting the application packet to CPOC are all inclusive.

If careerists interested in applying are unable to

obtain the required announcement, they can contact John Miller, USAREUR CP-18 Career Program Manager's Representative, at the following:

E-mail: millerj@heidberg-emh15.army.mil

Telephone: DSN 370-8229 Commercial 011-49-6221-57-8229

Mail: HQ USAREUR

Office of Deputy Chief of Staff,  
Engineer

ATTN: AEAEN-EH-E

Unit 29351

APO AE 09014

There is a broad range of professional challenges awaiting CP-18 careerists in USAREUR. The rewards of an overseas tour are many and include living quarters allowance, cost of living allowance, PX and commissary privileges, and the opportunity to travel throughout Europe. **PWD**



## Fort Hood cuts gas bill by 38 percent!

by Bobby Lynn

Fort Hood will reduce its annual gas bill by approximately \$1.7 million. That's a savings of 38 percent!

How do we plan to do that? Fort Hood is now participating in the Defense Fuel Supply Center (DFSC) program. Through this program, our installation buys gas from a third-party supplier. This is made possible by Federal Energy Regulatory Commission Order 636, which allows buying through the free market system.

Although our savings will be significant, the process was not simple or easy. Buying gas from another source was a new twist for Fort Hood and the Lone Star Gas Company, the local distribution company (LDC).

Here's how we did it. First, we performed a detailed cost analysis. In doing this, we discovered that four other installations (Dyess AFB, Carlswell AFB, Goodfellow AFB, and Sheppard AFB) would be directly affected. The Fort Hood DPW Energy Team partnered with these installations and

formed a team to develop the requirements and strategies for the negotiation phase with the LDC.

The team effort was a success, and a transportation agreement was drafted for local staffing and subsequent approval. This is a contract document which covers the requirements for transporting the gas from the supplier to Fort Hood using the LDC's pipeline. Because of the short suspense, the Fort Hood Directorate of Contracting (DOC) worked expeditiously with all parties to modify the current contract to include the transportation agreement.

The transportation agreement dictated the installation of an electronic metering system (telemetry) before the gas could be transported. This meant that telephone lines had to be installed for the telemetry system. Again, the

suspense was short. However, the Fort Hood Directorate of Information and Management (DOIM) processed the work request and ensured the installation of the telephone lines by a local source.

The effort by all parties clearly exhibited the team concept, both by DoD and all of Fort Hood. Ramona Penny and Doreen Wright (DOC) Dennis Sheppard and Regina Long (DOIM), and Bobby Lynn, Robert Kennedy, Jerry Valentine (DPW Energy Team), and Jim Butler, Kirk Marek, and Ira Perry (DPW, EPS) worked especially hard to see this project come to fruition. Without their support and "can do" attitude in expediting this process, the installation could have lost as much as \$283,000 of the savings.

☎ POC is Bobby Lynn, (817) 287-SAVE. **PWD**

*Bobby Lynn is the team leader for the Energy Management Team at Fort Hood, Texas.*

## Convert incandescent EXIT signs to use LED exit light sticks

The Defense Supply Center, Richmond (DSCR) has awarded a contract to E&M Lighting, Ltd. for LED exit sign retrofit kits. The items are on a Direct Vendor Delivery (DVD) contract with no minimum order quantities.

The LED light sticks operate on 1.8 watts versus the standard incandescent lamps for exit signs, which use 40 watts for 2 lamps. The labor savings can be substantial because the LED exit sign retrofit kit is guaranteed for 25 years. This also means no more safety violations when incandescent bulbs burn out every 45-60 days.

Here are some important facts:

- Each kit contains two LED light sticks and two Quick-Connect Socket Adapters.
- LEDs provide 80-100 years of reliable service with ultra-bright, even illumination.
- LEDs comply with OSHA, NEC, and NFPA Life Safety 101 Codes requirements and are UL 924 listed.
- LED light sticks emit a bright red light and are not recommended for use with green signs.
- In addition to DSCR's standard warranty, the manufacturer's 25-year warranty applies to LEDs.

- Replacement diffuser and adapter kits to fit existing sockets or hard wire kit to retro-fit existing fixtures are available.
- LEDs are compatible with single- or double-sided exit signs and are eligible for rebates from some utilities.

The following NSNs may be ordered via Milstrip/Fedstrip:

NSN	BASE	VOLTS
6240-01-413-6464	DC BAYONET	120
6240-01-413-6463	INTERMEDIATE	120
6240-01-413-6466	CANDELABRA	120
6240-01-413-6465	MEDIUM	120
6240-01-413-6468	HARD WIRE KIT	120/227

Dimensions: 6" H X 0.7" W X 0.615" D, each stick.

### DIFFUSER

NSN 6201-01-413-5873

Bright red replacement diffuser, 0.50" X 7.125" X 11.75"

☎ For more information on these products, call Gwen Woods or Robin Mapes at 1-800-352-2852 or DSN 695-6079 in the Product Marketing Office at the Defense Supply Center, Richmond. **PWD**



## CERL transitions out of GRASS

by Dana Finney

The U.S. Army Construction Engineering Research Laboratories (CERL) has announced it will no longer develop public domain software related to the Geographic Resources Analysis Support System (GRASS). Since 1985, CERL has released upgrades and enhancements to GRASS and provided technical user support. The lab will transition out of all GRASS-related work by spring of 1996.

"Ten to 15 years ago, when we started work on GRASS, we saw a major technology gap between the marketplace and the Army's requirements. So we provided the Army a set of GIS tools to help with environmental management," said Bill Goran, Land Management Laboratory Chief at CERL. "Since that time, GRASS has influenced the market, and many vendors offer good raster analysis features which rival the strengths of GRASS. Today the GIS providers are a mature industry fully capable of meeting the Army's needs."

GRASS is a geographic information and image processing system developed by CERL to help Army environmental managers model effects of military activities and practice stewardship. It has also supported environmental assessments and other compliance-related work.

While GRASS is public domain software, several companies use it or GRASS-like features in their commercial, off-the-shelf (COTS) products. These features provide the tools that had been identified as critical for military use. CERL is entering into partnering agreements with several key companies to help ensure continued support to military GIS users. To date, an agreement has been drafted with the Environmental System Research Institute, Inc., (ESRI), which produces Arc/Info, ArcView, and other products. CERL is also seeking agreements with

*"We'll continue developing decision support tools for the Army, but will be in a COTS environment where we believe their needs will be best served."*

—Bill Goran, CERL Land Management Laboratory Chief

Intergraph, MGE's producer, and with Logiciels et Applications Scientifiques, Inc. (LAS), a Montreal company providing COTS software products (GRASSLANDS) running in a PC environment and based on GRASS.

"We strongly encourage efforts with commercial vendors," said Richard Manning, who chairs the Installation Spatial Technology Advisory Board (ISTAB). "COTS software products are leading edge technology and apply to many natural resource and environmental applications." Manning is a natural resources planner at the Army Materiel Command's Dugway Proving Ground, UT. ISTAB was formed to represent the interests of Major Commands and installations in proving spatial technology for environmental management.

Under the planned agreements, CERL will take an active role in helping the industry partner understand the GIS needs of military installations and within the Army Corps of Engineers. In addition, CERL will continue developing advanced technology for geospatial modeling and specific applications related to land management. This will be cooperative development with COTS vendors to ensure all products will work with the systems used at military sites.

"We'll continue developing decision support tools for the Army, but will be in a COTS environment where we believe their needs will be best served," Goran explained. CERL has already begun implementing the X Windows version of the Cultural Resources In-

formation Systems which uses ArcView.

CERL will wrap up its work with GRASS this spring with an internet release of the enhancements funded through that time. However, no offline documentation, tutorials, or user support will be made available. Existing information on the GRASS world wide

web sites will be maintained for some time as background. To access the final features and GRASS information on the internet, the File Transfer Protocol (FTP) is 129.229.20.254, uniform resource locator (URL) is grass/grass4.1/release; or go to the GRASS link from the CERL home page at <http://www.cecer.army.mil>.

☎ For information, please contact Robert Lozar at CERL, (217) 373-6739 or toll-free, 800-USA-CERL, e-mail: [r-lozar@cecer.army.mil](mailto:r-lozar@cecer.army.mil). **PWD**

Dana Finney is the chief of the Public Affairs Office at CERL.

## Roster update

If you have changes to submit for the December 1995 Roster, please note the new phone numbers and e-mail address:

Call: (703) 428-9209 DSN 328  
Fax: (703) 428-6805  
e-mail: [richard.h.brown@cpw01.usace.army.mil](mailto:richard.h.brown@cpw01.usace.army.mil)

The electronic version of the December 1995 Roster is now available in the CPW DDS General Public File Library, and will soon be available on the CPW Worldwide Web Home Page. We are currently working on an electronic update of the December 1995 Roster, based on the changes you have been sending us. **PWD**



## Conference to examine competition in electric industry

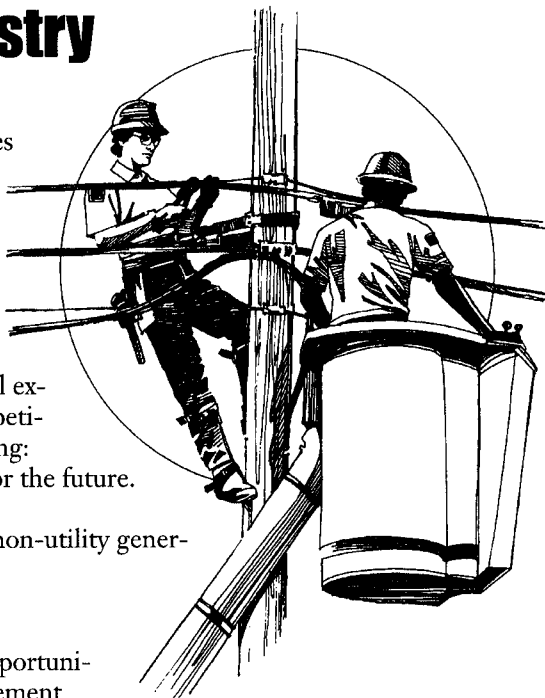
The National Academy of Sciences will host a workshop on competition in the electric industry on 1 May 1996 in Washington, D.C.

The workshop on Competition in the Electric Industry: Emerging Issues, Opportunities, and Risks for Facility Operators will examine several issues related to competition in the electric industry, including:

- Where it stands and prospects for the future.
- Perspectives of the regulators.
- Perspectives of the utilities and non-utility generators.
- Perspectives of customers.

The workshop will also examine opportunities, risks, management and procurement considerations for federal facility operators.

☎ For more information on the workshop, please contact James Walton at the Directorate of Army Power Procurement, USACPW, (703) 428-7363 DSN 328. **PWD**



## "Real World" Air Conference is a go!

Mark your calendars! The dates are locked in for the FORSCOM-sponsored "Real World" Air Conference.

The conference will be held on 3-6 September 1996, at the Sheraton Colorado Springs Hotel in Colorado Springs, Colorado. You may reserve a spot by calling (719) 576-5900. Negotiated rates are \$58.00 for a single and \$68 for a double, tax included. Rates may change if the per diem rates change. If you fly into the Colorado Springs Airport, you can use the Sheraton's courtesy van. There are a few restaurants within walking distance of the hotel.

The call for papers is being printed and the abstract suspense date is 5 April 1996. There will be no extensions to this date. Submissions may be made via regular mail or e-mail to: williaro@ftmcpshn-emh1.army.mil at INTERNET\_GATEWAY.

Be sure to set your e-mail for automatic return receipt.

The conference will begin Tuesday afternoon at approximately 3pm local time, and end at about 11am on Friday. The agenda is being finalized and will be sent out with the conference invitation in a few weeks. Field trips will be on a first come, first serve basis.

See you in Colorado!

☎ POC is Rochelle Williams, HQ, U.S. Army Forces Command, (404) 669-7695, FAX: (404) 669-7827, e-mail: williaro@ftmcpshn-emh1.army.mil. **PWD**

## CPW sponsors Corrosion Control Workshop

CPW is sponsoring a corrosion control workshop to be conducted by CERL at their facility in Champaign, Illinois. The workshop will be held 20-24 May 1996.

Installation personnel involved in O&M or design of buried utility distribution systems, steam or hot water boilers, chillers and cooling towers should attend. Topics to be covered include the types and process of corrosion, cathodic protection measures, and boiler/cooling water treatment. There is no cost for the workshop.

Corrosion control is one of the most cost-effective strategies available to a public works organization for maintaining buried metallic utility lines, underground storage tanks (USTs), and elevated water storage tanks. It is required on USTs by EPA regulations (40 CFR Part 280), and on natural gas lines by DOT regulations (49 CFR Part 192). The National Association of Corrosion Engineers estimates that the return on investment for corrosion control measures exceeds ten-to-one.

☎ For more information on the workshop or to register, please contact Vince Hock at CERL, (800) USA-CERL, ext 6753, or e-mail: v-hock@cecer.army.mil.

☎ For more information on corrosion control, please contact Jane Anderson, CECPW-ES, (703) 806-5214 DSN 656, or e-mail: jane.l.anderson@cpw01.usace.army.mil. **PWD**



# Public Works *Digest*

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